

First Quarter 1998

POLLUTION PREVENTION NEWSLETTER

NEW MANAGER TO HEAD COUNTY AIR QUALITY DIVISION

Steven Peplau, who has 24 years of experience in managing and administering environmental programs, has been appointed to the position of Air Quality Division Manager for the Maricopa County Environmental Services

Department.

Mr. Peplau's appointment comes three months after the Department announced the creation of the Air Quality Division, which is dedicated to protecting public health, minimizing regulated air emissions,

and educating the public on air quality issues. With an annual budget of \$4 million and 76 employees, Mr. Peplau is responsible for managing multiple air quality programs, including monitoring, permitting, inspections, rule development, and regional air quality planning.

Mr. Peplau most recently served as Director of Engineering and Enforcement for the State of Connecticut Department of Environmental Protection. In that capacity, he was responsible for field inspections and enforcement. administrative enforcement. permitting of both new source review and Title V development and implementation, stack testing, continuous emission monitoring, and the integration of new EPA initiatives and multi-media programs. Prior to that, he served in other positions with the State of Connecticut, including air quality investigator, air pollution control engineer inspecting large sources, administrative order writer, and enforcement supervisor.

Mr. Peplau has participated in numerous programs, including Small Business Assistance, The Hartford Neighborhood Environmental Project, Environmental Equity Inspection Program, Title V, Project XL Workgroup, and served as Chair of the Northeast States for Coordinated Air Use Management. He has an MBA in Finance from Rensselaer Polytechnic Institute and a Bachelor of Science degree in Natural Resources Management from the University of Connecticut.

Mr. Peplau lives in Scottsdale with his wife, Gail. Their two children, Rachel and Christopher, also reside in the Scottsdale and Phoenix area.

SECOND ANNUAL FRESH AIR SCIENCE FAIR

The Phoenix Urban Systemic Initiative (USI) and Phoenix College would like to invite you to participate in the Second Annual Fresh Air Science Fair on Saturday, February 28, 1998. The Fresh Air Science Fair is designed to challenge students from 77 elementary schools and

8 high schools in the Phoenix

inner city to use math, science, and/or technology to create solutions to the Valley's air pollution. Student groups will collaborate with a volunteer from the business or industry community to create an air pollution solution. All student groups that submit a project to the Fresh Air Science Fair will display their project on the Phoenix College campus on Saturday, February 28, 1998. Prizes will be awarded to student groups that create the best solutions to our air pollution.

If you are interested in working with a student group, please call Kathleen Preece (Phoenix College) at 285-7154 or Johanna M. Kuspert (Maricopa County) at 506-6710.

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HIGH AIR POLLUTION ADVISORIES AND WOODBURNING

RESTRICTIONS

Maricopa County has problems with three major air pollutants:

- •Carbon Monoxide (CO)
- Particulates (PM10)
 - •Ozone (O3)



In an effort to reduce air pollution in the Valley, the Residential Woodburning Restriction Ordinance was created. Residents can help by not using wood burning fireplaces or woodstoves when a High Air Pollution Advisory is in effect.

Carbon monoxide is a colorless, odorless gas that is easily absorbed by the lungs when inhaled. Increasingly high levels of CO may cause people to become exhausted more easily during exercise and can eventually cause headaches and dizziness.

During the winter, a layer of cooler air is trapped by a layer of warmer air above, forming a temperature inversion. These conditions intensify when stagnant air conditions exist. Inversions trap pollutants from vehicles, fireplaces, and other sources close to the ground, thus increasing the chance for CO and particulates to reach unhealthy levels. This carbon monoxide season runs from October through February each year, with the height of the season being from mid-November to mid-January.

During High Air Pollution Advisories, residents are advised to curtail intense outdoor exercise, and those with asthma or other cardiovascular or pulmonary problems should minimize exposure to outdoor air. Advisories are issued for a 24-hour period, from 10AM to 10AM the following day, to assist residents in complying with the ordinance.

Residents found in violation of the ordinance are issued a warning for the first offense, a \$50 fine for a second offense, and a \$100 fine for any other offenses within one year. Pellet stoves and other woodstoves that meet EPA standards can be used during restricted burn periods. However, you must register your device with the Environmental Services Department.



ENVIRONMENTAL COMPLAINT RESPONSE LINE

Have you ever wondered who to call to report a business that appeared to be violating a health code or perhaps an air quality regulation? The Environmental Services Department's Community Services Division operates the County's Environmental Complaint Response line to assist citizens with their complaints. The system is staffed by trained operators who receive and enter the complaint information into a computer. Complaints are automatically routed within minutes to the appropriate field office responsible for monitoring that specific business or activity. Callers are given a complaint tracking number as a reference so they can easily follow-up on the status of their complaint. The Complaint Response line operates Monday - Friday from 8 am to 5 pm and is closed weekends and holidays. Citizens calling after normal business hours may leave a message. The Complaint Line may be reached by calling 506-6616.

THINGS YOU CAN DO TO REDUCE AIR POLLUTION

- Combine errands and go shopping with a neighbor
- •Take the bus it takes at least 40 cars off the road. Call 253-5000 for schedules and locations of Park-And-Ride lots
- •Form a carpool or vanpool by calling 262-RIDE
- Convert your wood burning fireplace to gas or electric
- •Turn off your car if you foresee having to idle more than 1 minute
- Make sure your tires are properly inflated
- Avoid using gas-powered lawn equipment
- Stagger work schedules and drive during off-peak hours
- •Keep your car tuned
- •If you have property with bare earth, cover it with gravel or restrict access to avoid disturbing the soil

IMPORTANT TELEPHONE NUMBERS

•Environmental Services Complaint Line 506-6616

•High Air Pollution Advisory Hotline 506-6400

•Woodburning Exemptions 506-6700 For more information on restricted burn days, burning tips, and the Residential Woodburning Restriction Ordinance, call 253-2687.



Carbon Monoxide And Ozone Reclassification

On August 28, 1996 the U.S. Environmental Protection Agency (EPA) reclassified Maricopa County from a *moderate* to a *serious* non-attainment area for carbon monoxide (CO). According to this reclassification, Maricopa County is required to submit a plan to EPA, due on February 28, 1998, for reducing the CO levels to meet federal standards by December 31, 2000.

Carbon monoxide is a colorless, odorless, poisonous gas formed when carbon in fuels is not burned completely. In urban areas, automobile exhaust may contribute up to 80 percent of CO emissions, particularly in areas with heavy traffic congestion. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators.

Maricopa County was reclassified because it did not reach attainment by the date set. However, significant progress was made in spite of an increase in population and vehicle miles traveled within the County. The Environmental Services Department will work with the Maricopa Association of Governments to develop a plan based on reducing motor vehicle travel. This plan will also identify methods for measuring the reduction in vehicle miles traveled and demonstrate progress made toward the federal standards.

The Maricopa County Trip Reduction Program (TRP) has made progress during the past few years in reducing the number of trips made by employees of companies that have 50 or more staff members. The TRP promotes carpooling, van pooling, bus riding, and alternative methods of transportation to reduce the number of vehicle miles traveled in the County.

Other measures currently in place for reducing CO pollution include Arizona's enhanced vehicle inspection and maintenance program, the wintertime oxygenated fuels programs, and clean burning gasoline programs. Traffic light synchronization programs, intersection improvement programs, and removal of on-street parking are some of the techniques that have been implemented to improve traffic flow and reduce the concentration of CO in congested areas. Maricopa County is also addressing CO pollution through an ordinance to restrict Residential Woodburning. For more information about CO measures, please call 506-6010.

Late last summer, the U.S. EPA announced its finding that the Phoenix metropolitan area failed to meet the health-based 1-hour air quality standard for ground-level ozone (smog) by its Clean Air Act deadline of November 15, 1996. The reclassification has now been finalized and took effect on December 8, 1997.

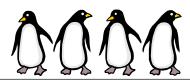
The reclassification is based on Phoenix air monitoring data from 1994 through 1996. During this three-year period, the nonattainment area has experienced 21 days of unhealthy air quality, recording 44 exceedances and 13 violations of the 1-hour ozone standard (including 7 exceedances in 1996), with a peak ozone value of 0.145 parts per million (ppm). The 1-hour ozone standard is 0.12 ppm. Most of the exceedances have been recorded in the eastern part of the metropolitan area.

This reclassification triggers new planning and control requirements that are scheduled to continue to the end of 1999. For major sources of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (Nox), the threshold amounts for discharge will be reduced from 100 tons per year (TPY) to 50 TPY. This means that more companies will be classified under the Title V permitting requirements of the federal Air Quality Act.

Additional requirements affecting major sources include development of new Maricopa County Air Pollution Control Rules to address additional source categories including Pharmaceutical Production, Polystyrene Resin, Fiberglass Boats Manufacturing, and Expandable Foam Manufacturing. For major modifications, the significance level will decrease from 40 TPY to 25 TPY. For major sources, the new source review offset ratio will increase from 1.15 to 1, to 1.2 to 1.

Other requirements for the reclassification include enhanced monitoring, stricter vehicle inspection (already in place), a program for requiring cleaner burning gasoline, and a program to reduce the amount of vehicle miles traveled in the County. Reasonable progress must be made in reducing the Ozone levels in Maricopa County by 3% per year through 1999. This progress will demonstrate that the federal Ozone standards will be attained and is due to EPA by December 8, 1998.

	January 1998							
Sun	Mon	Tue	Wed	Thu	Fri	Sat		
Emission	Inventory Forr	ns Mailed Out		New Year's Day CLOSED	2	3		
4	5	6	7	8	9	10		
11	12	13	14	15 RULE WORKSHOP	16	17		
18	19 Martin Luther King Jr. Day CLOSED	20	21	22 RULE WORKSHOP	23	24		
25	26	27	28	29	30	31		



February 1998							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14 Valentine's Day	
15	16 Presidents' Day CLOSED	17	18	19	20	21	
22	23	24	25	26	27	28	

TIPS FROM THE GREEN PAGES

Nearly all valley residents - 94% - believe air quality to be a big or moderate problem. Just over half - 52% - indicated they or a family member experience health-related problems when pollution levels are high. Some people don't take environmental issues seriously, but most don't realize the impact one individual can have in protecting and conserving the world in which we all live.

Here are a few suggestions on how each of us can help:

- •Users of alternative transportation and telecommuters currently save 100 tons of pollutants each day.
- •10% of the Valley's summer air pollution is directly attributable to emission from gas-powered garden equipment. Try using a rake or broom it's great exercise.
- •Cars should be refueled after 4pm. Waiting until later in the evening cuts down on the time fumes have to react with sunlight.
- •A car's tank should never be topped off when fueling. Spilling one cup of gas puts as much pollution into the air as driving a 1993 model car 160 miles.
- •Close lids tightly on household cleaners, paints, and chemicals. When purchasing these items, look for environmentally friendly products.
- •By December 16, 2000, if no further controls are put in place, 75.8% of carbon monoxide emissions in the County will come from on-road vehicles.
- •In Maricopa County, carbon monoxide is primarily a winter problem (Oct-March), ozone is mostly a summer problem (May-Sept), and particulates are a year-round problem.
- •Operating a gasoline-powered lawn blower for 1 hour may be equal to 34 hours of driving a new car; a gasoline chain saw equals 63 hours of driving; and a gasoline weed-whacker equals 21 hours of driving.
- •If you must use gasoline-powered equipment, mow your lawn after 4pm during the peak ozone season (May 15 Sept 30)
- •Painting contributes a lot of VOCs to our air. Substitute water-based for oil-based paints and use rollers or brushes instead of spray painting.
- •About 65,000 Valley commuters bike to work one or more days a week. Bicyclists help reduce the amount of pollution generated by more than 657,889 pounds annually.

(Sources: Clean Air Campaign/Regional Public Transportation Authority, Maricopa Association of Governments; Air Quality Policy Committee, Maricopa County Environmental Services Department)



March 1998								
Sun	Mon	Tue	Wed	Thu	Fri	Sat		
1	2	3	4	5	6	7		
8	9	10	11	12	13	14		
15	16	17 St. Patrick's Day	18	19	20 Spring Equinox Earth Day Activities	21		
22	23	24	25	26	27	28		
29	30	31	'		<u></u>			





	April 1998							
Sun	Mon	Tue	Wed	Thu	Fri	Sat		
			1	2	3	4		
5	6	7	8	9	10 Passover	11		
12 Easter	13	14	15	16	17	18		
19	20	21	22 Earth Day First Celebrated	23	24	25		
26	27	28	29	30 Emission Inventory Reports Due	4			

Rule Revisions Anticipated to be Completed March 1998

Rule 100 (General Provisions And Definitions)

New Rule 201 (Emissions Caps)

Rule 220 (Non-Title V Permit Provisions)

New Rule 347 (Ferrous Sand Casting)

ANNUAL EMISSION INVENTORIES

It's emission inventory (EI) time! Starting in January 1998, the annual EI forms will be mailed to those businesses with air quality permits that have received EIs in the past. These businesses will need to report air pollutants emitted in 1997. Annual EI reports will be due April 30, 1998.

Rule Revisions Anticipated to be Completed June 1998

Rule 210 (Title V Permit Provisions)

Rule 280 (Fees)

Rule 310 (Open Fugitive Dust Sources)

Rule 315 (Spray Coating Operations)

Rule 316 (Nonmetallic Mineral Mining And Processing)

Rule 331 (Solvent Cleaning)

Rule 336 (Surface Coating Operations)

Rule 338 (Semiconductor Manufacturing)

New Rule 348 (Aerospace Coating)

Rule 352 (Gasoline Delivery Vessels)

Rule 353 (Transfer Of Gasoline Into Stationary Storage Dispensing Tanks)

Rule 370 (Federal Hazardous Air Pollutant Program)



MARICOPA COUNTY 1997 PM-10

PROGRAM IMPROVEMENTS

In 1995, Maricopa County's nonattainment area for particulates was downgraded from Moderate to Serious for failure to attain the federal health standard. This standard sets the measure for particulates at 10 microns or less (PM-10). Under the Serious classification, the State must submit a new Nonattainment Area Plan which demonstrates that the area meets both the short term (24-hour) and the annual average PM-10 standards by the end of 2001.

Adding to the complexity of the plan adoption procedure is a court decision. Ober v. Browner, which ruled that Arizona did not adequately address the 24hour standard in the 1991 Moderate Area PM-10 Plan for the Maricopa County area. As a result, the Plan submitted must demonstrate that all "reasonably available control measures" (RACM) have been implemented to address the sources which contribute to violations of the 24-hour PM-10 standard.

During the planning process in 1997, agencies in Maricopa County worked to reduce particulate Based on recommendations from joint pollution. meetings with other agencies and industry, Maricopa County has revised its PM-10 Program. Improvements to the program include:

- Revisions to the Rule 310 Dust Control Plan to include more details corresponding to the various activities which take place on construction sites.
- Revisions to the "Pollution Prevention Guide for Construction" which reflect the changes to the Dust Control Plan and which include several "Helpful Hints" sheets containing information on techniques.
- Implemented a weekend inspection program in June. Inspectors are scheduled to visit sites on a random basis one weekend a month.
- Revised internal inspection checklists, standard procedures. administrative operating and procedures to follow the revised Dust Control Plan.
- Provided updated Staff Training on revisions to the Rule 310 programs.
- Developed a curriculum for external training of Cities and Industry.

GOVERNOR HULL APPOINTS AIR QUALITY TASK FORCE

Arizona Governor Jane Dee Hull signed an executive order on November 13, 1997 creating the 1997-1998 Governor's Air Quality Strategic Task Force. The Task Force is charged with helping to develop plans Pagto address carbon monoxide, particulate matter, and ozone pollution in the Phoenix Metropolitan nonattainment area. The Task Force will submit a final report to the Governor on February 16, 1998.

The Task Force is comprised of an extremely diverse group of people who represent affected interests in the health community, industry, municipalities, and many others. Various sub-committees have been formed and weekly public meetings have been scheduled.

Public input is encouraged and any ideas or suggestions can be mailed to the Arizona Department of Environmental Quality at 3033 North Central Avenue, Phoenix, 85012, or faxed to 207-2366.

MARICOPA COUNTY TO OFFER \$200 TOWARD THE PURCHASE OF A CLEANER **COMMERCIAL LAWN MOWER**

Maricopa County Environmental Services Department will be the first in the country to offer commercial cutters \$200 towards the purchase of a new EPA-approved lawn mower when an older one is traded-

The County's new lawn mower program, sponsored by Salt River Project and A to Z Equipment, will begin the mower exchange on January 2, 1998. Two of A to Z Equipment sites will be open 7 days a week to make it easy for licensed and unlicensed commercial operators to trade-in a mower for a new EPA-approved mower.

The Program came about as a result of the omnibus air quality bill HB2237 that was authorized by the Governor on April 11, 1997 as a new control measure to reduce ozone and carbon monoxide air emissions in the Valley.

Gasoline-powered lawn mowers are estimated to account for 7 to 8 percent of total hydrocarbon (VOC) emissions. A dirty lawn mower operated for 20 hours a year produces the same amount of smog-forming VOC pollution as a 1996 passenger car driven for 26,000 miles.

The public/private partnership will ensure that mowers traded-in as part of the program will be decommissioned and sent to a metal recycler for shredding.

Innovative programs like this and others currently being discussed will help reduce Valley air pollution and preserve the quality of life for future generations to enjoy.



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Maricopa County Environmental Services Department
Air Quality Division
1001 N. Central Avenue, Suite 201
Phoenix, AZ 85004
Phone: 506-6010

Phone: 506-6010 Fax: 506-6179

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Visibility impairment is primarily caused by the presence of tiny particles in the air which cause light to be scattered or absorbed. This creates a haze which obscures the clarity, color, texture, and form of what we see.



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Air Quality Division
1001 N. Central Ave., Suite 201
Phoenix, Arizona 85004

If you know anyone who would like to be on our mailing list, please call 506-6010.